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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,825	12/21/2005	Erland Austreng	ZNA-PT014	4280
3624 7590 06/01/2007 VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			EXAMINER MAKIYA, DAVID J	
			ART UNIT 2885	PAPER NUMBER
			MAIL DATE 06/01/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/533,825

Applicant(s)

AUSTRENG ET AL.

Examiner

David J. Makiya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/3/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Saigo et al. (US Patent 6,606,453).

With respect to claim 1, Saigo et al. teaches an illumination box for true, reproducible colour reproduction of an object, comprising side walls, a top plate and a bottom plate (Figure 1), wherein between the top plate and the bottom plate there is provided a light diaphragm 105 which divides the illumination box into a light chamber above the light diaphragm and an object chamber beneath the light diaphragm (Figure 1), which light diaphragm admits and diffuses light from a plurality of light sources (L3, L4, L5, L6) arranged in the light chamber, characterized in that the light diaphragm is attached to an essentially light-impenetrable screening frame 101 adjacent to the side walls, with the plurality of light sources distributed along the side walls at a distance from the side walls and from the screening frame such that an area for placement of the object is screened from essentially all direct light from the plurality of light sources (Column 4, Lines 5-10), and that an aperture 103 is provided in the object chamber for observation of the object.

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With respect to claim 2, Saigo et al. teaches the illumination box, characterized by being essentially closed to external light (Figure 1).

With respect to claim 3, Saigo et al. teaches the illumination box, characterized in that the light diaphragm is arranged essentially parallel to the bottom plate (Figure 1).

With respect to claim 5, Saigo et al. teaches the illumination box, characterized in that the plurality of light sources is in the form of a plurality of fluorescent tubes (Column 7, Lines 59-62), preferably of the type with the specifications 55W, about 5800 Kelvin.

With respect to claim 10, Saigo et al. teaches the illumination box, characterized in that the number of fluorescent tubes is four (Figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saigo et al. in view of Haas et al. (US Patent 6,454,939).

With respect to claims 6 and 8, Saigo et al. teaches the illumination box as described above, but fails to teach the bottom plate in the object chamber provided with a drawer for insertion and withdrawal of the object. Haas et al. teaches an illumination box comprising a light chamber 62 holding light sources 60, an object chamber 64, an aperture 56 with a camera 58, a drawer 52 for insertion and withdrawal of the object (Figure 3) and the aperture and shutter values of the camera are not altered from image to image (Column 3, Lines 30-42). It would

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have been obvious to one of ordinary skill in the art at the time of the invention to modify the box of Saigo et al. in view of Haas et al. because “a bottom drawer 52, which slides in and out of the box 50” (Hess et al.; Column 3, Lines 30-42) would allow quick access to the object and the camera would be “aligned for optimum pixel resolution of the CCD images of a standard TLC” (Hess et al. Column 3, Lines 30-42).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saigo et al. in view of Bourn et al. (US Patent 6,554,452).

With respect to claim 7, Saigo et al. teaches the illumination box as described above, but fails to teach the inside of the top plate and the bottom plate is matt black, and that the inside of the sidewalls is white or black. Bourn et al. teaches an illumination box 200 comprising side walls, a top plate and a bottom plate, light sources wherein the inside surfaces are black (Column 13, Lines 16-27 and Column 17, Lines 42-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the surfaces of Saigo et al. with the teachings of Bourn et al. because a black surface would “prevent stray reflections” (Bourn et al.; Column 17, Lines 42-49).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saigo et al. in view of Lai et al. (US Patent 6,672,737).

With respect to claim 9, Saigo et al. teaches the illumination box as described above, but fails to teach a sleeve-shaped shade of diffuser material surrounds each of the plurality of fluorescent tubes. Lai et al. teaches an illumination box comprising a top plate with an aperture 34 and a camera 50, a plurality of fluorescent tubes 40 with a sleeve-shaped shade 42 of diffuser material surrounds each of the plurality of fluorescent tubes (Figure 3). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to modify the fluorescent tubes of Saigo et al. with the teachings of Lai et al. because the diffusers would produce “uniform radiation intensity” (Lai et al.; Column 2, Lines 56-62).

***Allowable Subject Matter***

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 4, the pertinent prior art fails to teach or suggest an illumination box comprising a light diaphragm that admits and diffuses light while separating the box into a light chamber above and an object chamber below having a hole in a central area of the light diaphragm for photographing the object using a camera located on the top plate, and a light-impenetrable, non-reflective means which form a closed channel between the lens aperture of the camera and the hole in the light diaphragm.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maring et al. (US Patent 4,812,904) and Lai et al. (US Patent 6,814,468) teach illumination boxes with apertures in the top plate. Tarsia (US Patent 6,106,124) and Goto (US Patent 5,664,232) teach illumination boxes with light and object chambers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Makiya whose telephone number is (571) 272-2273.

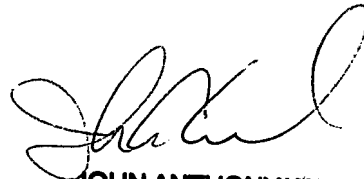
The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm (ET).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJM 05/26/2007



**JOHN ANTHONY WARD**  
**PRIMARY EXAMINER**